WO 2004/091550 PCT/US2004/009614

CLAIMS

10

20

25

1. A composition comprising a substantially purified composition including an adhesive and a polypeptide comprising amino acid sequence LKKTET or a conservative variant thereof.

- The composition of claim 1 wherein said adhesive is capable of adhering to tissue of a living subject.
 - 3. The composition of claim 2 wherein said adhesive is biodegradable.
 - 4. The composition of claim 1 wherein said adhesive is fibrin, fibrinogen, fibrin glue, collagen, a fragment thereof, or a mixture thereof.
 - 5. The composition of claim 4 wherein said adhesive and said polypeptide are covalently bound together.
 - 6. The composition of claim 5 wherein said adhesive and said polypeptide are covalently bound by factor XIIIa.
- 7. The composition of claim 6 wherein said adhesive is a fragment of fibrin or fibrinogen.
 - 8. The composition of claim 1 wherein said polypeptide comprises amino acid sequence KLKKTET or LKKTETQ, Thymosin β4 (Tβ4), an N-terminal variant of Tβ4, a C-terminal variant of Tβ4, an isoform of Tβ4, a splice-variant of Tβ4, oxidized Tβ4, Tβ4 sulfoxide, lymphoid Tβ4 or pegylated Tβ4.
 - 9. The composition of claim 1 wherein said polypeptide is recombinant or synthetic.
 - 10. The composition of claim 1 wherein said polypeptide is an antibody.

WO 2004/091550 PCT/US2004/009614

11. The composition of claim 10 wherein said antibody is polyclonal or monoclonal.

- 12. The composition of claim 4 wherein the concentration of said polypeptide is within a range of about 0.01-1 mole said polypeptide per mole of said adhesive.
- 13. The composition of claim 12 wherein said range is about 0.1-0.5 mole said polypeptide per mole of said adhesive.
- 14. The composition of claim 13 wherein said range is about 0.2-0.4 mole said polypeptide per mole of said adhesive.
- 15. The method of delivering a polypeptide to a site, comprising introducing the composition of claim 1 to said site.

5

10

20

25

- 16. The method of claim 15 wherein said composition is applied to said site by spaying.
- 17. The method of claim 16 wherein said site is a wound.
- 15 18. The method of claim 15 wherein said adhesive is capable of adhering to tissue of a living subject.
 - 19. The method of claim 18 wherein said adhesive is biodegradable.
 - 20. The method of claim 15 wherein said adhesive is fibrin, fibringen, fibrin glue, collagen, a fragment thereof or a mixture thereof.
 - 21. The method of claim 20 wherein said adhesive is covalently bound to said polypeptide.
 - 22. The method of claim 21 wherein said adhesive is covalently bound to said polypeptide by factor XIIIa.
 - 23. The method of claim 22 wherein said adhesive is a fragment of fibrin or fibrinogen.

WO 2004/091550 PCT/US2004/009614

24. The method of claim 15 polypeptide comprises amino acid sequence KLKKTET or LKKTETQ, Thymosin β4 (Tβ4), an N-terminal variant of Tβ4, a C-terminal variant of Tβ4, an isoform of Tβ4, a splice-variant of Tβ4, oxidized Tβ4, Tβ4 sulfoxide, lymphoid Tβ4 or pegylated Tβ4.

- 25. The method of claim 15 wherein said polypeptide is recombinant or synthetic.
- 26. The method of claim 15 wherein said polypeptide is an antibody.

5

10

15

- 27. The method of claim 26 wherein said antibody is polyclonal or monoclonal.
- 28. The method of claim 20 wherein said polypeptide is a concentration that is within a range of about 0.1-1 mole said polypeptide per mole of said adhesive.
- 29. The method of claim 28 wherein said range is about 0.1-0.5 mole said polypeptide per mole of said adhesive.
- 30. The method of claim 29 wherein said range is about 0.2-0.4 mole said polypeptide per mole of said adhesive.